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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,908	06/21/2001	Yuji Mori	501.40272X00	4769

20457 7590 01/30/2003

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EXAMINER

PHINNEY, JASON R

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/884,908

Applicant(s)

MORI ET AL.

Examiner

Jason Phinney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a), (c), and (d), which papers have been placed of record in the file. In order to receive the benefit of foreign priority a certified translation of the foreign documents is required in accordance with 35 U.S.C. 119(b) paragraph 3.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,821,692 to Rogers.

fo Regarding Claim 1, Rogers discloses an organic electroluminescent display comprising a transparent substrate (Figure 1, # 12), an organic light emitting layer (#18) which is formed on a back surface side of the substrate, an electric current supply means which makes an electric current flow through the organic light emitting layer (#'s 16 and 20), a housing which covers at least the organic light emitting layer and is sealed to the transparent substrate (<sup>12</sup>~~#22~~), and a heat radiation material in a liquid form which is filled in a space formed between the housing and the transparent substrate (# 34 and Column 3, Lines 15–25).

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Regarding Claim 2, Rogers discloses that the housing is formed of metal (Column 3, Line 9).

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 4,734,338 to Eguchi.

per Regarding Claim 1, Eguchi also discloses an organic electroluminescent display comprising a transparent substrate (Figure 4, # <sup>41</sup>~~43~~), an organic light emitting layer (#40) which is formed on a back surface side of the substrate, an electric current supply means which makes an electric current flow through the organic light emitting layer (#'s 45 and 44), a housing which covers at least the organic light emitting layer and is sealed to the transparent substrate (#41), and a heat radiation material in a liquid form which is filled in a space formed between the housing and the transparent substrate (also # 41).

Regarding Claim 3, Eguchi further discloses that the heat radiation material in a liquid form is silicone oil (Column 33, Lines 18-20).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,734,338 to Eguchi in view of U.S. Patent No. 6,049,167 to Onitsuka.

Eguchi discloses all of the limitations of Claim 1 as described above.

Eguchi fails to exemplify that the water which is contained in the heat radiation material as impurity amounts to not more than 100 ppm by weight ratio. Eguchi mentions that the material has been dried but not the degree to which this should be done.

Onitsuka, in a similar organic electroluminescent display teaches that the water content of the material between the housing and the substrate should be not more than 100 ppm in order to minimize the chance for corrosion of the electrodes (Abstract, Line 9).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the display of Eguchi with the water content taught by Onitsuka in order to reduce the chance for the corrosion of the electrodes.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,189,405 to Yamashita in view of U.S. Patent No. 5,821,692 to Rogers.

Yamashita discloses an electroluminescent display comprising a transparent substrate (Figure 3, # 2), first electrodes which are extended in the x direction and are arranged in parallel in the y direction on a display region at a back surface side of the transparent substrate (# 11), a light emitting layer which is formed on the display region such that the light emitting layer also covers the first electrodes (# 13), second electrodes which are extended in the y direction and are arranged in parallel in the x direction on a surface of the organic light emitting layer (#15), a metal housing which covers at least the organic light emitting layer and is sealed to the

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transparent substrate (# 51), and a non-conducting liquid which is filled in a space formed between the housing and the transparent substrate (#8).

Regarding Claim 5, Yamashita fails to exemplify that the electroluminescent layer should be an organic electroluminescent layer.

Regarding Claim 6 Yamashita fails to exemplify that the first and second electrodes may be formed such that one end thereof are extended and reach the outside of the housing.

Rogers, in an alternate sealed electroluminescent display device, teaches that organic electroluminescent materials may be used instead due to their improved luminance and efficiency (Column 2, Lines 38-39). Rogers also teaches that the first and second electrodes may be formed such that one end thereof are extended and reach the outside of the housing in order to easily make electrical connection with the electrodes (Column 2, Line 65 – Column 3, Line 6).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the display of Yamashita with the organic electroluminescent material and electrodes taught by Rogers in order to improve the luminance and efficiency of the display as well as provide an easier means for electrical connection of the electrodes.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,189,405 to Yamashita in view of U.S. Patent No. 5,821,692 to Rogers and further in view of U.S. Patent No. 6,049,167 to Onitsuka.

Yamashita in view of Rogers teaches the organic electroluminescent display of Claim 5 as described above.

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Yamashita in view of Rogers fails to exemplify that the water which is contained in the heat radiation material as impurity amounts to not more than 100 ppm by weight ratio.

Onitsuka, in a similar organic electroluminescent display teaches that the water content of the material between the housing and the substrate should be not more than 100 ppm in order to minimize the chance for corrosion of the electrodes (Abstract, Line 9).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the display taught by Yamashita in view of Rogers with the water content taught by Onitsuka in order to reduce the chance for the corrosion of the electrodes.

### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Phinney whose telephone number is (703) 305-3999. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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JP

January 21, 2003

  
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